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## CASES OF

## EXTRA-UTERINE PREGNANCY; ABDOMINAL SECTION;

REMARKS UPON TREATMENT.

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WE are now passing through what might be called the heroic age in the treatment of extra-uterine pregnancy. Where the lines that are to guide us will be finally laid down has not as yet been determined. Hence I do not consider it out of place to take up a few moments of your time in remarks upon a few recent cases. I will quote the history of the case from which this specimen was taken, as given in a letter from Dr. Ellen H. Heise, of Canton, Ill.:

"The patient is Mrs. Charles M., wife of a well-to-do farmer. She has been an office patient of mine for two years. Had a tender ovary and sometimes dysmenorrhea. Occasionally menstruation has been delayed a week or ten days, at which times she always hoped she was pregnant. She is 33 years old, has a child 9 years of age, and has been sterile

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since its birth. She menstruated May 15th and missed the June period. July 12th she had a severe paroxysm of what she described as vesical tenesmus, which, after lasting a few hours, left her rather sore. July 20th another attack, and a second, on the same day, more severe than the other attacks. Dr. Sutton, of Canton, saw her and referred her to me. She had been cold, vomited, and felt faint. She came to my office in about a week, told me she had now menstruated again naturally, except that a thin piece of skin had come from the vagina (this was July 27th). The pain returned August 5th. She came to town the 8th and had another recurrence. She then complained of rectal tenesmus as much as the vesical. and I found the whole contents of pelvis so sore that I made no attempt to examine at that time. Later (the 13th) she had the severest attack. The pain was greatest in the region of the liver and transverse colon, and the shock was great. We found her faint and almost pulseless, pale, and cold. Next day she had a temperature of 102° F., pulse 140, respiration 32. Abdomen swollen and tympanitic. Bowels have been regular, but micturition and defecation painful. Complains as if foreign body was in rectum. I introduced my finger and found a soft, roundish mass in front of rectum, which I concluded was a hematocele due to extra-uterine pregnancy. There was a moderate flow the third day after this, painless. The breasts have been tender, areola darker, dark lines in the linea alba from the umbilicus. Waist measure now twenty-eight inches, which has been twenty-four. There was nausea during June. Her fever only lasted three days, the soreness has subsided, and she is in good condition. To-day (September 2d), however, a flow has again started, about like a menstrual flow."

I arrived in Canton September 8th, and upon examining the patient found some fulness and dulness over lower half of abdomen. The cul-de-sac and pelvis seemed filled with a soft, intraperitoneal hematocele. We opened the abdomen, and, upon introducing the fingers, let out a small quantity of bloody serum, and came upon an abundance of intestinal and omental adhesions. The right Fallopian tube entered a soft, dark-colored mass, about an inch from the uterine horn. The mass filled the left and posterior portions of the pelvic cav-

ity, from which it was enucleated. There was hemorrhage into the tube, into the fetal sac, and into the cul-de-sac of Douglas. The blood was well organized, and it is probable that no more hemorrhage would have occurred. The other ovary was not disturbed except to separate a few frail adhesions. A drainage tube was left for thirty hours. The recovery has, so far, been a pleasant one. Flatus passed on the second day, after which the patient was comfortable.

In examining the specimen we notice one interesting fact, viz., while the fetal sac is still easily distinguishable, the fetus is all but lost in the clot. Indeed, I did not discover the fetus until it had soaked in alcohol for twenty-four hours, when it was sufficiently hardened to be separated. It was soft, of the same color as the clot, and about one and one-half inches long. Dr. Robert Dodds made the pathological examination, identifying the tissues microscopically.

Whether the fetus died early and the placenta went on developing, or whether the hemorrhage continued after the death of both fetus and placenta, or whether the later attacks were unaccompanied by hemorrhage and merely due to the disturbance of an intraperitoneal hematocele, is a matter of some doubt. I believe, however, that the last explanation is the right one.

In this case we have, on August 13th, three months after the regular menstrual period, an attack of "severe abdominal pain, faint and almost pulseless, pale and cold," temperature next day of 102° F., pulse 140, respiration 32. The fever lasted but three days. Here we have symptoms calling for an abdominal section, according to our later authorities, yet at the operation I found only about half a pint of organized blood, surrounded by intestinal adhesions and free from the danger of recurrent dangerous hemorrhage. I should also say that she had slight attacks of pain and uterine hemorrhages after this severest one and up to the time of the operation. I find the explanation of these attacks, not in the increasing development of the fetus or recurrence of hemorrhages, but in sudden attacks of localized peritonitis due to getting up and going about after the acute attack had subsided somewhat. She was going about the house when I arrived in Canton. If there is one thing above all others

that has been demonstrated to me over and over again in my experience, it is that recurrent uterine hemorrhage and local inflammatory reaction are brought about, in cases of pelvic hematocele, by the patient getting up and going about too soon after the effusion has taken place, or after one of the short localized acute attacks. In cases of recurring effusion the cause has often been the same; and I do not doubt that in cases of internal hemorrhage from extra-uterine pregnancy, the later and often the fatal hemorrhages are brought about by disturbances from without. I think there is but little doubt that the first considerable hemorrhage nearly always kills the fetus and but seldom kills the mother. The fetus dead, the hemorrhage stopped, what should bring it on again ? Undoubtedly the same things that would start up fresh bleeding in any other part of the body, viz., disturbance of the parts by motion, pressure, physical exertion, causing increased heart action, etc.

I will briefly allude to a few experiences that have brought me to this way of thinking. At a recent meeting of this Society (April 17th, 1891) I reported the case of Mrs. G., for whom I performed abdominal section for extra-uterine pregnancy. Both Dr. Fenger and myself diagnosed a living fetus but a few days before the operation, yet I found the fetus macerated and not developed up to the time of supposed pregnancy. The activity of the symptoms had deceived both of us. Her attacks of pain, nausea, faintness, and uterine hemorrhages came after physical exertion, her worst one after a ride of several miles in the street cars, while spending the day with friends at the opposite end of town. Altogether six or eight ounces of blood had been effused. This same patient had an extra-uterine pregnancy several years before, with intraligamentous hematoma and passage of decidua, in which the uterine hemorrhages and pains recurred for weeks until I put her to bed and kept her there, when they finally subsided.

I was called about a year ago to assist Dr. Frank Cary in attending a case which we diagnosed as aborted extra-uterine pregnancy with large intraperitoneal hematocele. The paroxysms were severe, the shock profound, and the effect upon the patient marked. I noticed upon examination that the

mass of effusion, although soft, presented some resistance to the finger. The conditions for an abdominal section were unfavorable, so we kept her on her back for a number of days, not allowing her to move without assistance, and kept her in bed for some time. The paroxysms subsided permanently. Before that she would get up as soon as comfortable after each paroxysm, and bring on another attack by her exertions. The hematocele after a few weeks suppurated and was opened per vaginam by Dr. Cary. The patient recovered. This makes four cases coming under my observation in which there was no danger of hemorrhage, and therefore no indication for abdominal section on that ground. I have had several cases of hematocele which, according to my present experience, I consider to have been cases of aborted extrauterine pregnancy. I have seen many cases in the practice of others, but have never seen a case ending fatally from hemorrhage without operation.

In looking over the records of laparatomy for extra-uterine pregnancy, I find that in a very great majority of the cases where rupture had taken place the amount of blood effused was not a dangerous one, the clots were quite firm, and subsequent hemorrhage would not have taken place without considerable disturbance. The faintness, nausea, and weak pulse came from the shock caused by a foreign body in the peritoneum more often than from the amount of blood effused.

From all this I have been led to believe that the danger of death from hemorrhage in extra-uterine pregnancy is very slight if the patient be kept quietly in bed for a long period.

The number of observed cases of extra-uterine pregnancy are greatly on the increase. Formerly we only discovered the fatal cases, while now we are discovering also those who get well; and when we have learned to diagnose all of those cases that get well, we will find that the death rate of all taken together is a small one. Extra-uterine pregnancy is again coming to be regarded as the cause of a large proportion of pelvic bloody effusions.

The question of treatment is one of great interest. While we are finding out that the great mass of them will get well without interference, we have learned, on the other hand, that we can easily cure nearly all of them by abdominal section. There is a small class of cases in which the woman dies of internal hemorrhage unless relieved by operation. But how many of them would bleed to death were they put on their backs for a month, and not allowed to move about in bed without help for the first few days, it is difficult to determine. The other main source of danger is sepsis. Is this avoidable? I have noticed that pelvic bloody effusions are rapidly absorbed when the patient is kept quiet, but that, when the patient gets up too soon and too often, slight attacks of inflammatory reaction, often accompanied by metrorrhagia, occur, and of course often finally lead to suppuration. With the rest treatment many cases that suppurate would not; and when they do suppurate during the first half of pregnancy they are not usually fatal, for the abscess is generally localized in the pelvis and can be evacuated from below.

Now, if it shall be found that nearly all cases in which the fetus dies early get well, the destruction of the fetus by electricity will come into successful rivalry with laparatomy. Undoubtedly more cases will get well by having the fetus killed than by waiting for its destruction by hemorrhage.

Another interesting question is whether after the fourth month we should allow the fetus to go on to full term or not. Since there are not half a dozen cases on record in which both mother and child have lived after the operation, there can be but little excuse for him who would do this. The time has not yet come. The mother's chances in waiting until or after term are too poor. Whether we should skill thechild by electricity and operate later, or operate at once, is a query that it would be difficult to answer. When we can, by symptoms and examination, determine whether or not the placenta can be safely removed, we will know which to do. When the placenta must be left in the peritoneal cavity, the danger of sepsis is of course greater after the abdomen has been opened, and it would be better to destroy the fetus and wait for the immature placenta to lose part or all of its vascularity. When the ovum is developed in an adventitious sac in the pelvic connective tissue, we need not wait so long as in the other case, for it can be left in the sac without so much danger, provided we can avoid hemorrhage from partial accidental separation. When the placenta can be safely removed, the operation in the later months is

always indicated; for if we kill the fetus and leave it there is still great danger of sepsis, and if we allow it to go on to full term the placenta becomes daily more difficult to manage.

During the ninth month an immediate laparatomy in the interests of the child would seem to be indicated, for it is liable to die at almost any time, and its presence is injurious if alive and dangerous if it die. According to Fenger's investigations, the danger of the death of the mother from sepsis is greater than from an immediate abdominal section at term.

I would say, then, that if we have a case of extra-uterine pregnancy in the early months, it would be safe to destroy the fetus by electricity, and keep the patient in bed until absorption has noticeably commenced. If rupture have occurred without serious hemorrhage, and a well-defined hematocele be discovered, we may put her to bed, diet her, keep her quiet, and wait, being at the same time ready for a laparatomy. If profuse repeated hemorrhages occur, it is safer to operate at once according to Tait's precepts. If development have gone on after the middle of pregnancy, either an immediate abdominal section is indicated, or feticide with operation later. In the ninth month, and at term, operate in the interests of the child, unless false labor have occurred. After that operate upon the appearance of the first evidence of sepsis.

I am aware that some of the views here expressed are not in accord with some of the latest teachings, but a few observations in cases of extra-uterine pregnancy, and quite a number in cases of pelvic hematocele, have seemed to me to justify me in offering them to you for criticism.